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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,703	09/12/2003	Peter Kulzer	ITT-557-A	8235

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EXAMINER	
VAN, LUAN V	

ART UNIT	PAPER NUMBER
1753	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/661,703	KULZER, PETER	
	Examiner	Art Unit	
	Luan V. Van	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 26, 2006 has been entered.

Response to Amendment

Applicant's amendment of June 26, 2006 does not render the application allowable.

The amendment filed June 26, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Regarding claim 1, the limitation of "electrolyte circulating through under high pressure" is deemed to be new matter. The instant specification does not explicitly support that the electrolyte is circulated through under high pressure. The specification states that the electrolyte is "pumped through" and "flows through" but not circulated through, which suggests specific means in which the electrolyte travels within the cell.

Regarding claim 11, the limitations of "pre-baffle chamber", "pre-baffle chamber having at least two opposing side walls", and "openings of sufficient size" are deemed to be new matter. The instant specification does not disclose that the pre-baffle forms a chamber. The pre-baffle has at least two opposing side walls is broader in scope than what is supported by the disclosure, since the pre-baffle can have more side walls than those disclosed in Fig. 3. Finally, the disclosure does not clearly teach "sufficient size" openings.

The disclosure, therefore, does not provide a clear indication to support the amended limitations. Applicant is required to cancel the new matter in the reply to this Office Action.

Status of Objections and Rejections

All rejections from the previous office action are withdrawn in view of Applicant's amendment.

New grounds of rejection are necessitated by the amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the limitation of "electrolyte circulating through under high pressure" is deemed to be new matter. The instant specification does not explicitly support that the electrolyte is circulated through under high pressure. The specification states that the electrolyte is "pumped through" and "flows through" but not circulated through, which suggests specific means in which the electrolyte travels within the cell.

Regarding claim 11, the limitations of "pre-baffle chamber", "pre-baffle chamber having at least two opposing side walls", and "openings of sufficient size" are deemed to be new matter. The instant specification does not disclose that the pre-baffle forms a chamber. The pre-baffle has at least two opposing side walls is broader in scope than what is supported by the disclosure, since the pre-baffle can have more side walls than those disclosed in Fig. 3. Finally, the disclosure does not clearly teach "sufficient size" openings.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelini in view of Doetzer et al.

Regarding claim 1, Angelini teaches a plating device comprising of at least one cell or plating tank (figure 1, tank 29), a contact box (figure 1, box 23') located after the cell in the direction of transportation, at least one partition (figure 3, feature 29') separating the cell from the contact zone, and a seal (figure 3, feature 57) surrounding the work piece, characterized in that the seal is situated at the outlet of the jet cell to precisely align with an outer perimeter of the workpiece and having an opening slightly larger than an outer perimeter of the workpiece (Fig. 7). The seal or diaphragm 57 is capable of being operated without contacting the workpiece if air is not supplied to the supplying chamber 58.

Angelini differs from the instant claims in that the reference does not explicitly teach the jet cell (interpreted as a closed system) of the instant claim.

Doetzer et al. teach a galvanic deposition apparatus using a cell 1 sealed from the exterior.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the apparatus of Angelini by using the galvanic cell of Doetzer et al., because it would suppress the entry of air and moisture to the electrolysis bath, thus preserving the conductivity and life of the electrolyte (column 1 lines 30-40 of Doetzer et al.) The galvanic cell of Doetzer et al. is structurally capable of having an electrolyte flowing through under high pressure, since it is an enclosed system.

Regarding claim 2, Angelini teaches the cylindrical body (figure 7, feature 30) which functions as a pre-baffle.

Regarding claim 3, Angelini teaches a plating device wherein the pre-baffle (figure 7, feature 30) acts as a mount for the seal.

Regarding claim 4, the pre-baffle 30 of Angelini is structurally capable of creating back- pressure to slow the electrolyte stream leaving the plating tank.

Regarding claim 5, Angelini teaches a plating device wherein the seal is formed by a plate type (column 7 lines 47-52).

Regarding claim 6, Angelini teaches a plating device wherein the seal above the pre-baffle occupies a specifed position (figure 3, feature 30) with respect to the work piece.

Regarding claim 7 and 8, the difference between the reference to Angelini and the instant claims is that the reference does not explicitly teach the pre-baffle is made of plastic nor the pre-baffle has an essentially cubic bowl shape.

Angelini teaches "a tubular plastic acid resistant material 57 [in figure 7] e.g., an acid resistant rubber, is attached and sealed to openings 56 at its ends and, along with body 30, forms a hermetically sealed annular chamber 58."

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Angelini by making the body or pre-baffle out of plastic, because it would prevent corrosion or wear of the the body or pre-baffle from exposure to the electrolyte. Furthermore, the specific shape of the sealing sleeve body or pre-baffle would be a matter of design choice within the abilities of one having ordinary skill in the art.

Regarding claim 11, Angelini teaches a plating device comprising of at least one cell or plating tank (figure 1, tank 29), a contact box (figure 1, box 23') located after the cell in the direction of transportation, at least one partition (figure 3, feature 29') separating the cell from the contact zone, and a seal (figure 3, feature 57) surrounding the work piece, characterized in that the seal is situated at the outlet of the jet cell to precisely align with an outer perimeter of the workpiece and having an opening slightly larger than an outer perimeter of the workpiece (Fig. 7). The seal or diaphragm 57 is capable of being operated without contacting the workpiece if air is not supplied to the supplying chamber 58. In addition, Angelini teaches the hollow cylindrical body (figure 7, feature 30) which functions as a pre-baffle. The pre-baffle of Angelini has at least two opposing sidewalls with two coaxial openings formed in the opposing sidewalls of the chamber. Further, the pre-baffle of Angelini is structurally capable of creating back-pressure to slow the electrolyte stream leaving the plating tank.

Angelini differs from the instant claims in that the reference does not explicitly teach the jet cell (interpreted as a closed system) of the instant claim.

Doetzer et al. teach a galvanic deposition apparatus using a cell 1 sealed from the exterior.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the apparatus of Angelini by using the galvanic cell of Doetzer et al., because it would suppress the entry of air and moisture to the electrolysis bath, thus preserving the conductivity and life of the electrolyte (column 1 lines 30-40 of Doetzer et al.) The galvanic cell of Doetzer et al. is structurally capable of having an electrolyte flowing through under high pressure, since it is an enclosed system.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Angelini in view of Doetzer et al., and further in view of Labenski et al.

Angelini and Doetzer et al. teach the apparatus as described above in addressing claims 1-6.

The difference between the reference to Angelini and the instant claim is that the reference does not explicitly teach the device is configured to galvanize brake lines.

Labenski et al. teach that "the requirements of the automobile industry regarding the corrosion resistance of the parts which are vital for the safety of the vehicle, as for instance brake conduits, have become more stringent and as a consequence correspondingly stricter regulations have been enacted regarding their quality that affect

all production stages of such parts, thus giving rise to the problem of the present invention of providing a coating for corrosion protection which meets the requirements for the finished article and which is not only adequate to tolerate the mechanical deformation to which the corrosion protected article is subjected during manufacture and finishing operations, but which is also particularly suited to tolerate such treatment" (column 1 lines 12-30). In addition, Labenski et al. teach galvanizing break lines with zinc coating (column 1 lines 62-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Angelini and Doetzer et al. by galvanizing break lines as taught by Labenski et al., because it would provide a coating for corrosion protection which meets the requirements for the finished article.

Response to Arguments

Applicant's arguments filed June 26, 2006 have been fully considered but they are not persuasive.

In the arguments presented in the amendment, the applicant argues that the electroplating tank of Angelini is incapable of having an electrolyte flowing through under pressure since it is an open tank. The examiner respectfully disagrees. An electrolyte being pumped through the electroplating cell of Angelini is capable of being pumped through under high pressure even if it is an open tank. The instant claims do not require that the jet cell is under high pressure but rather that the electrolyte is circulated or pumped through under high pressure. Furthermore, since the applicant

does not define high pressure in the disclosure, any pressure except under vacuum can be broadly interpreted as high pressure. During patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). See MPEP 2111. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Nevertheless, Doetzer et al. teach a galvanic deposition apparatus using a cell 1 sealed from the exterior. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the apparatus of Angelini by using the galvanic cell of Doetzer et al., because it would suppress the entry of air and moisture to the electrolysis bath, thus preserving the conductivity and life of the electrolyte (column 1 lines 30-40 of Doetzer et al.) The galvanic cell of Doetzer et al. is structurally capable of having an electrolyte flowing through under high pressure, since it is an enclosed system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan V. Van whose telephone number is 571-272-8521. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LVV
September 14, 2006

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